

# **METHOD AND APPARATUS FOR PREVENTING SPANNING TREE LOOPS DURING TRAFFIC OVERLOAD CONDITIONS**

## **ABSTRACT**

One embodiment of the present invention provides a system that prevents loops from occurring when spanning tree configuration messages are lost while executing a spanning tree protocol on bridges in a network. During operation, the system executes the spanning tree protocol on a bridge. This spanning tree protocol configures each port coupled to the bridge into either a forwarding state, in which messages are forwarded to and from the port, or a backup state, in which messages are not forwarded to or from the port. The system also monitors ports coupled to the bridge to determine when messages are lost by the ports. If one or more messages are lost on a port, the system refrains from forwarding messages to or from the port until no messages are lost by the port for an amount of time.